

Work Order ID 148278

Tuesday, June 28, 2016 9:00:12 AM

148278

Page 1

Item ID: 647.3902

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Deflector Assembly, High

Start Date: 6/22/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/27/2016 Req'd Qty: 2.00

2

Customer:

Reference:

DAS
21

Approvals:

Process Plan:

Date: JUL 04 2016

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.3900	C2

110	Pick Kit	0.00
-----	----------	------

110

Packaging

Memo

0.00

Packaging

DAS
6
9-89

OCT 06 2016

120

0.00

120

Small Fab

Memo

0.11

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces per note .

A/R RTV LOCTITE 598:

exp. date: 01/16

135419

2x 16/10/12 DAS 36 9-89

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.01

Quality Control

(2)

DAS
38
9-89

OCT 12 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 148278

Tuesday, June 28, 2016 9:00:12 AM

148278

Page 2

Item ID: 647.3902**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Lower Deflector Assembly, High**Start Date:** 6/22/2016 **Start Qty:** 2.00***2*****Cust Item ID:****Required Date:** 6/27/2016 **Req'd Qty:** 2.00***2*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

140

Identify as per dwg & Stock Location: CCK077

0.00

140

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER IAW MPP-120

2DAS
6
9-89OCT 14 2016

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.03

Quality Control

DAS
21
9-89OCT 14 2016DAS
21
9-89OCT 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, June 28, 2016 9:00:11 AM

Page 1

Work Order ID: 148278

148278

Parent Item: 647.3902

647 3902

Parent Item Name: Lower Deflector Assembly, High

Start Date: 6/22/2016

Required Date: 6/27/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 13.09.03 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
647.3912 *647 3912* Lower Deflector		Manufactured	No				Each	11.0000	**	² DAS 6 9-89		OCT 06 2016	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				CCK077			11						
				127896			10			2			
				131075			1						
647.3914 *647 3914* Breakaway Tip, Long		Manufactured	No				Each	3.0000	**	² DAS 6 9-89		147490 OCT 06 2016	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				CCK015			3						
				140988			3						
MS20470AD6-12 *MS20470AD6-12* Rivet		Purchased	No				Each	119.0000	**	⁶ DAS 6 9-89		OCT 06 2016	
				<u>Location</u>			<u>Loc Qty</u>	<u>Loc Code</u>					
				ST308			119			2			
				m127304			119						

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : _____							

DART AEROSPACE APICAL INDUSTRIES, INC. dba DART AEROSPACE	ENGINEERING CHANGE NOTICE NO. 04948				SHEET 1 OF 2	
	DWG NO. 647.3900	REV: C	PREPARED BY: M. ANDECK	DATE: 05/04/15	EFFECT ON DWG ☐ INC. ☒ UNINC.	
	DWG TITLE: DEFLECTORS					
APPROVED BY: ENGR <i>[Signature]</i>		MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER		
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED TOLERANCE AND NOTES				ECR: D-15-01

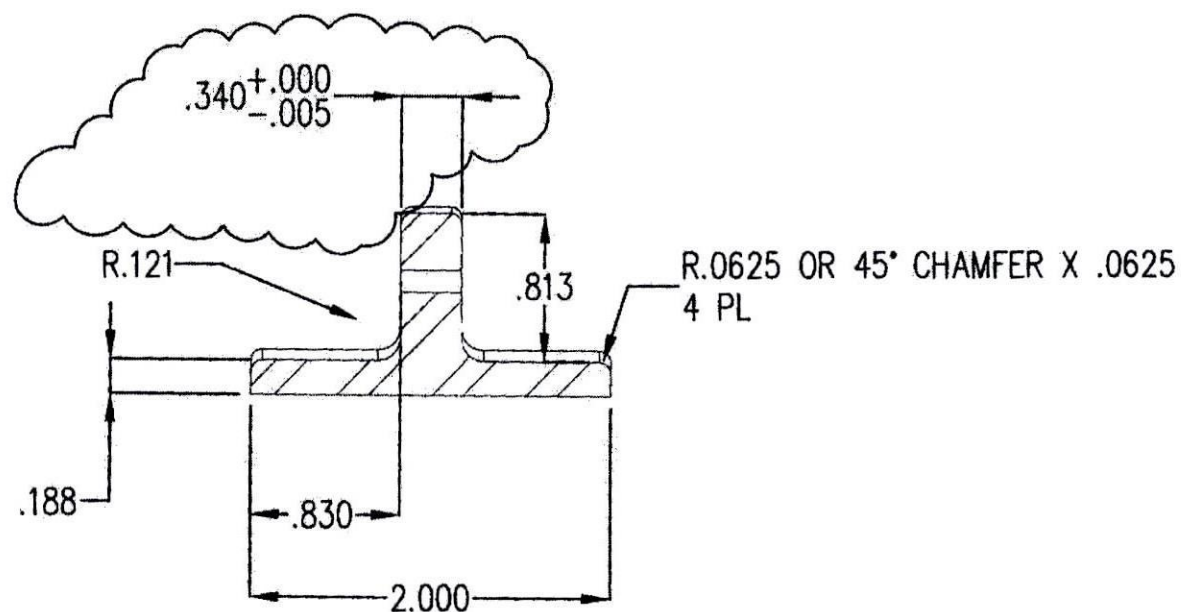
SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 148278 ML5
 160704

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.
- 10 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4.

SHEET 1, ZONE B1 IS:

11	R	647.3917	2			DOUBLER		
F/N	TC	PART NUMBER	.3903	.3902	.3901	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY					
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO	



SECTION AT-AT

SHEET 11, ZONE C1 IS:

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04556

SHEET 1 of 2

DWG NO. 647.3900

REV: C

PREPARED BY D. MEJIA

DATE: 06/10/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: DEFLECTORS

APPROVED BY: ENGR

MFG

QC

EFF. NEXT ORDER

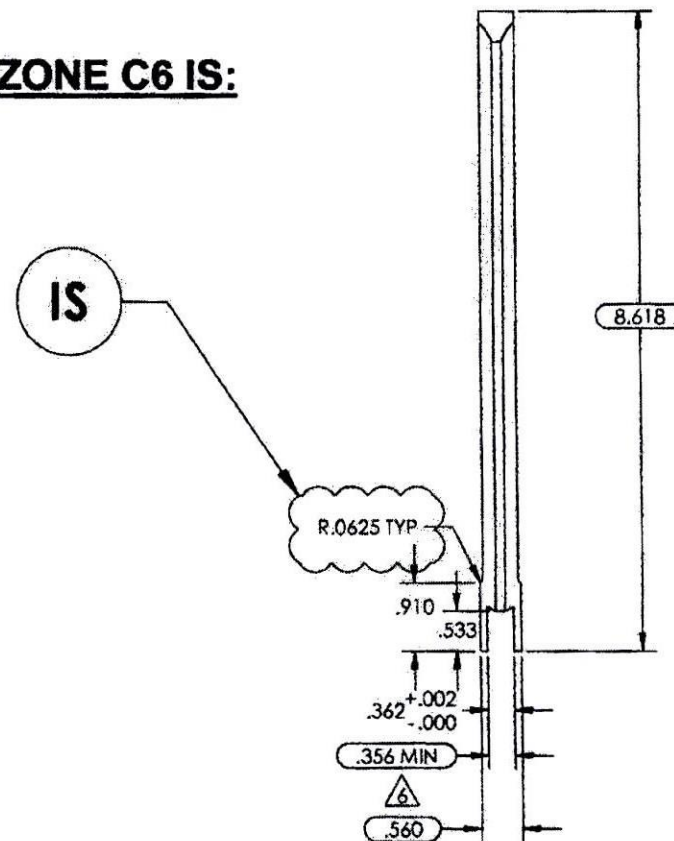
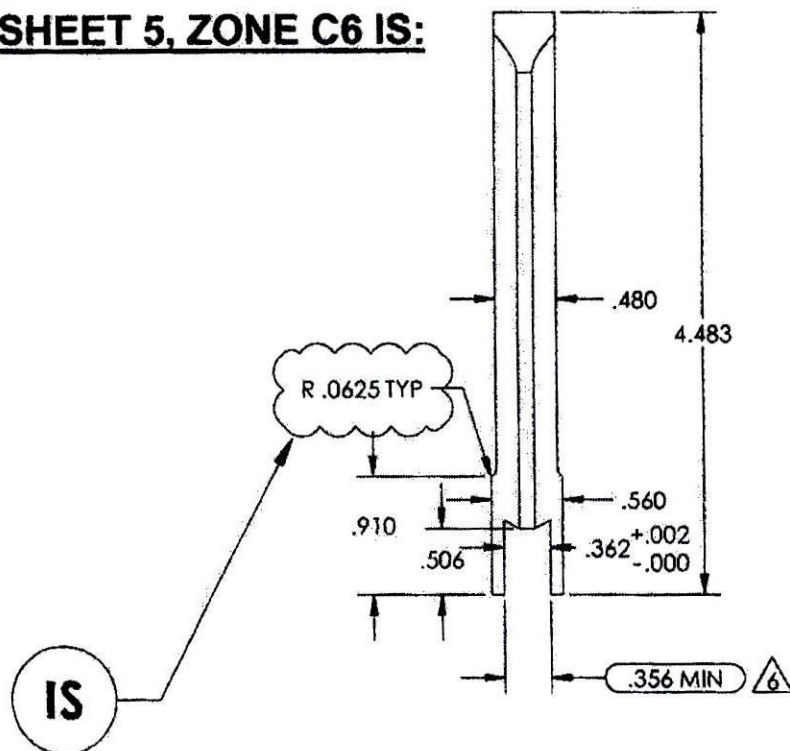
TRANSACTION CODES (TC):
 A-ADD C-CREATE
 R-REVISE D-DELETE

REASON: CHANGED P/N, DIMENSIONS & REVISED BOM

ECR: D-14-04

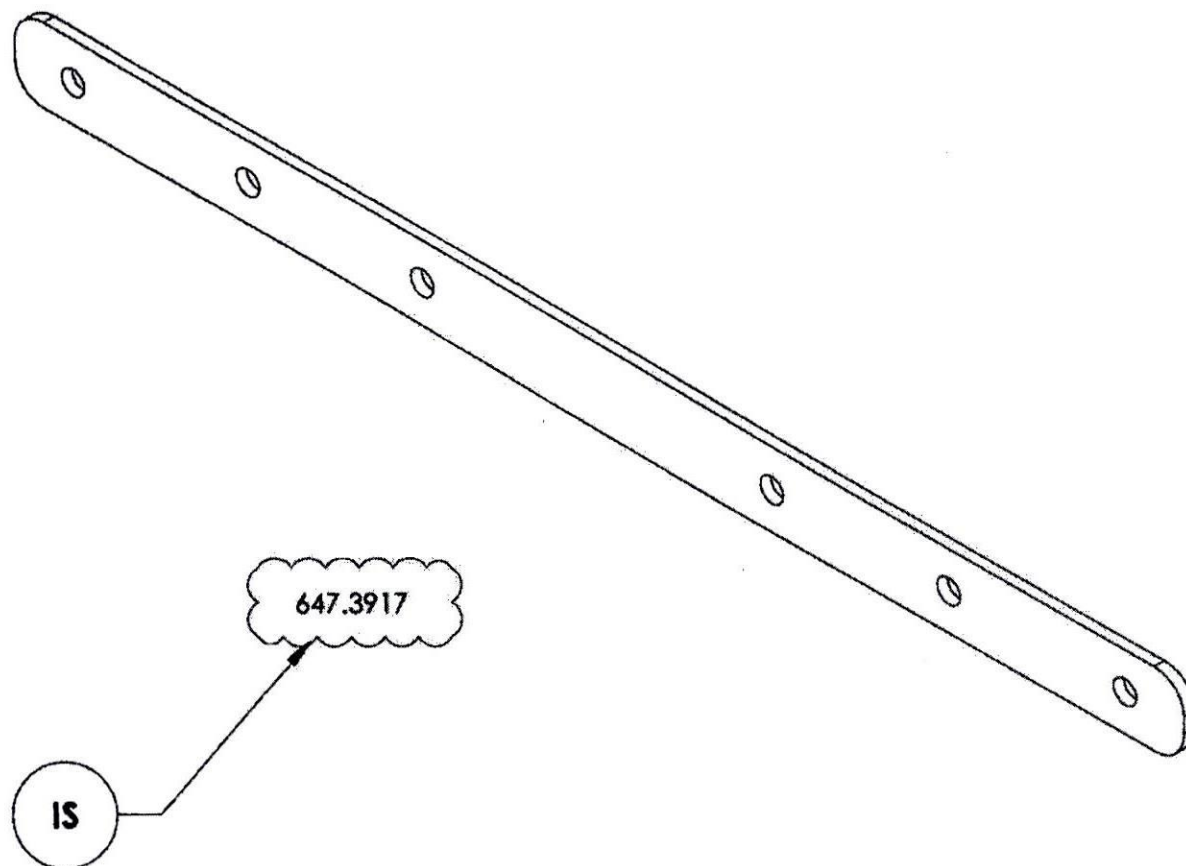
SHEET 5, ZONE C6 IS:

SHEET 6, ZONE C6 IS:



SHEET 1, BOM IS:

11	R	647.3917	2		DOUBLER		
F/N	TC	PART NUMBER	QTY		DESCRIPTION	MATERIAL	SPECIFICATION
		.3903 .3902 .3901					
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED
						☐ MAJOR ☒ MINOR	☐ YES ☒ NO
						☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM	

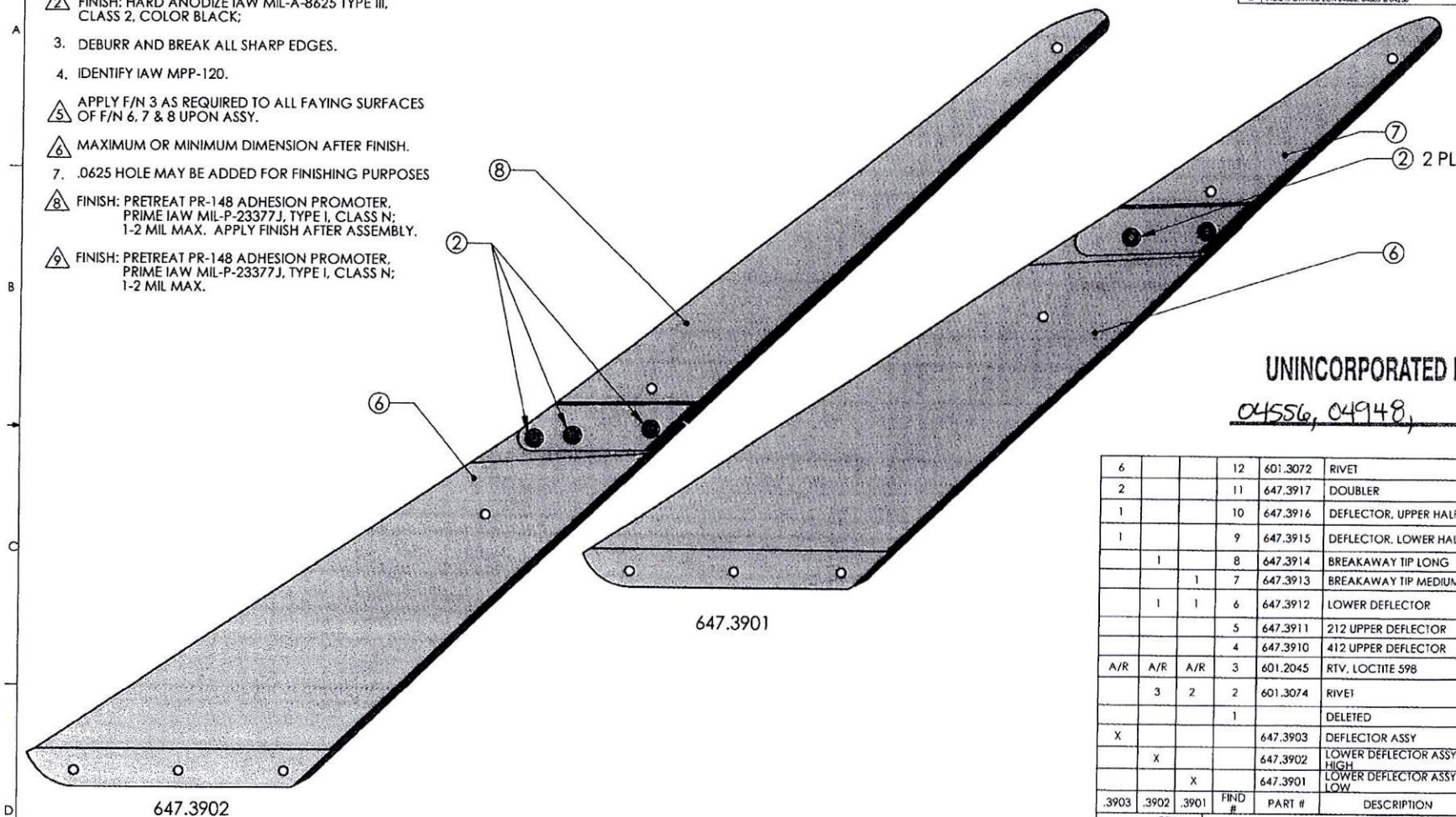
SHEET 12, ZONE B5 IS:

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NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12.
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
3. DEBURR AND BREAK ALL SHARP EDGES.
4. IDENTIFY IAW MPP-120.
- 5 APPLY F/N 3 AS REQUIRED TO ALL FAYING SURFACES OF F/N 6, 7 & 8 UPON ASSY.
- 6 MAXIMUM OR MINIMUM DIMENSION AFTER FINISH.
7. .0625 HOLE MAY BE ADDED FOR FINISHING PURPOSES
- 8 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX. APPLY FINISH AFTER ASSEMBLY.
- 9 FINISH: PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N; 1-2 MIL MAX.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	LAST PROTOTYPE RELEASE-FRI		
N/C	INITIAL RELEASE	09/10/09	P. BRAVO
A	INCORPORATED ECN 0284, 0333P & 0359S	07/24/12	P. BRAVO
B	INCORPORATED ECN 0422S	08/02/13	P. BRAVO
C	INCORPORATED ECN 0428, 0485 & 0423D	11/18/13	P. BRAVO



UNINCORPORATED ECN(S)

04556, 04948,

6			12	601.3072	RIVET	CR3213-6-9	
2			11	647.3917	DOUBLER		
1			10	647.3916	DEFLECTOR, UPPER HALF	△	△
1			9	647.3915	DEFLECTOR, LOWER HALF	△	△
	1		8	647.3914	BREAKAWAY TIP LONG	△	△△
		1	7	647.3913	BREAKAWAY TIP MEDIUM	△	△△
	1	1	6	647.3912	LOWER DEFLECTOR	△	△△
			5	647.3911	212 UPPER DEFLECTOR	△	△△
			4	647.3910	412 UPPER DEFLECTOR	△	△△
A/R	A/R	A/R	3	601.2045	RTV, LOCTITE 598		△
	3	2	2	601.3074	RIVET	MS20470AD 6-12	
			1		DELETED		
X				647.3903	DEFLECTOR ASSY		△
	X			647.3902	LOWER DEFLECTOR ASSY HIGH		
		X		647.3901	LOWER DEFLECTOR ASSY LOW		
.3903	.3902	.3901	FIND #	PART #	DESCRIPTION	MAT'L	SPEC
QTY				PARTS LIST			
NEXT ASSY (S)				ORIGINAL DATE 09-10-09			
647.3800				DRAWN BY: D. SCHUBB			
				CHECKED BY: J. BARKER			
				DRAWING APPROVAL P. BRAVO			
				09-10-09			
				CONTRACT NO.			
				UNLESS OTHERWISE SPECIFIED			
				DIMENSIONS ARE IN INCHES			
				TOLERANCES ARE:			
				2 PLACES DECIMALS ±.01			
				3 PLACES DECIMALS ±.005			
				ANGLES ±.5°			
				SHEET 1 OF 12			
				SCALE NONE			

APICAL INDUSTRIES

2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

DEFLECTORS

SHEET 07M26 DWG. NO. 647.3900

SCALE NONE SHEET 1 OF 12

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.125 X 45.0° TYP

SECTION B-B

Ø.177 THRU 3PL

.266 X 17.9°

.045

.603

R.915

.923

2.110±.002

4.220±.002

DETAIL A

R.279

R3.406

15.896

15.304

15.046

B

B

Ø.189

6.446

40.2°

.312

0

18.502
18.127

35.8°

10.702
8.599

6.253
1.700
.777
0

6

.340^{+.000}
-.002

.346 MAX

DETAIL C

.700

.035 X 45.0° TYP

.375

15.896

647.3911

ORIGINAL DATE
DRAWN BY
CHECKED
DATE
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005
ANGLES ±.5°

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

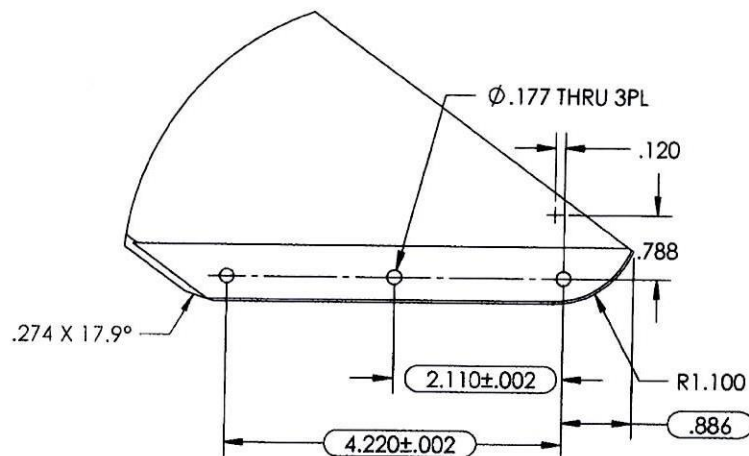
DEFLECTORS

SIZE	CAGE CODE	DWG. NO.	REV
B	07MZ6	647.3900	C
SCALE NONE		SHEET 2 OF 12	

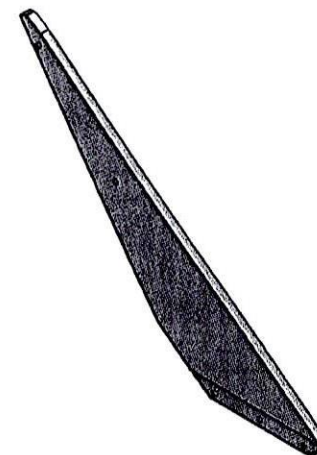
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.125 X 44.9°

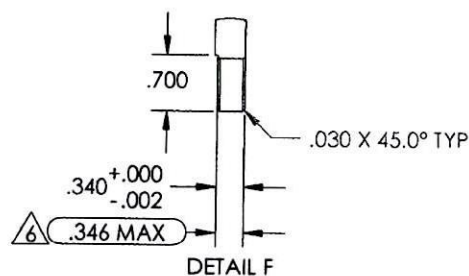
SECTION E-E



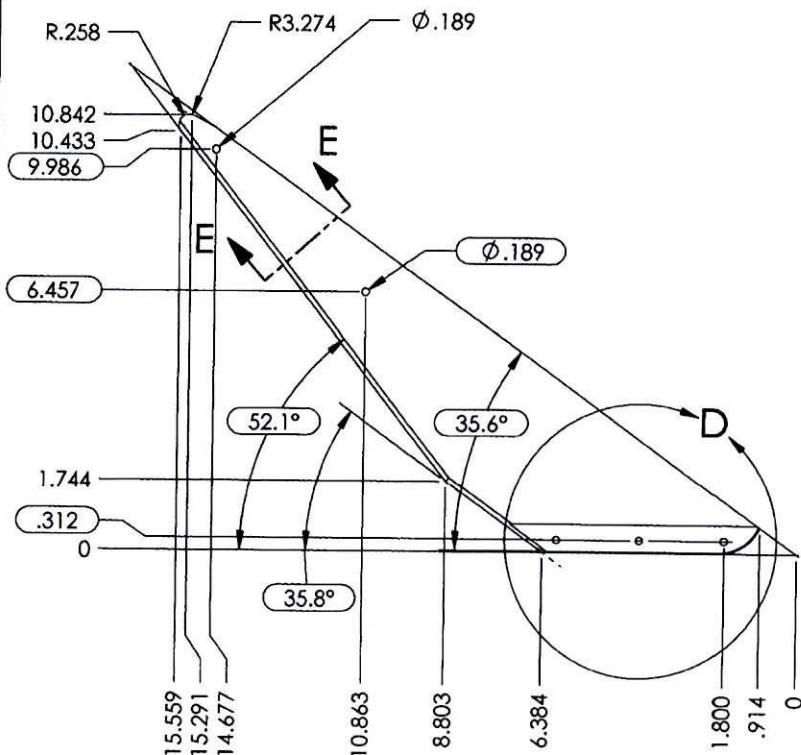
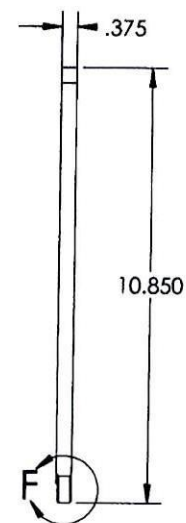
DETAIL D



647.3910

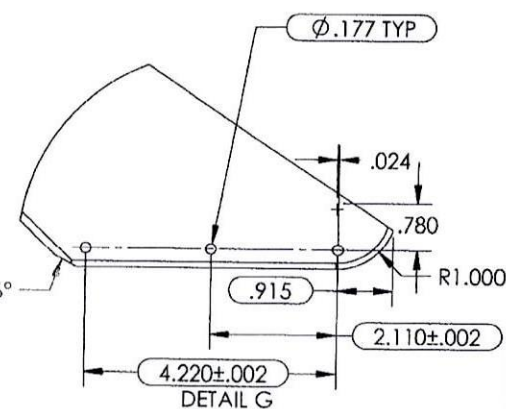
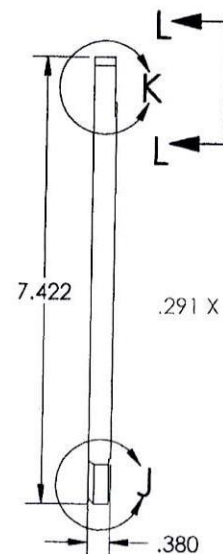
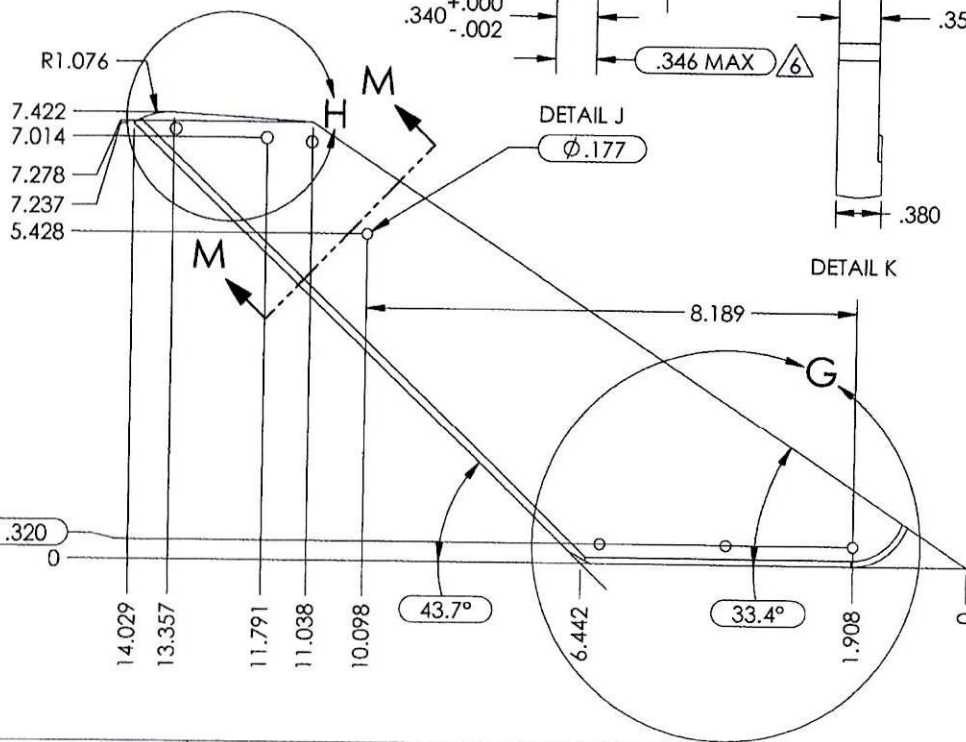
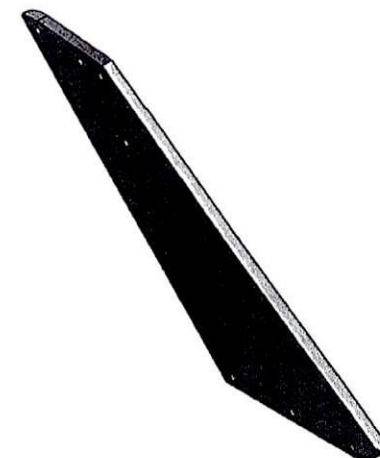
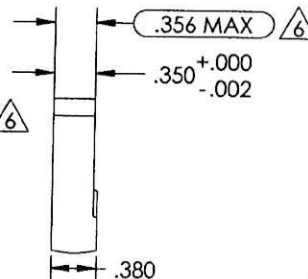
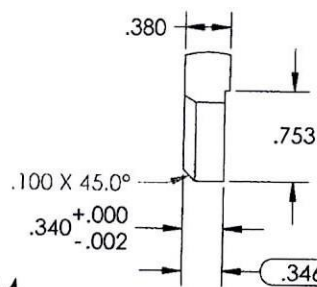
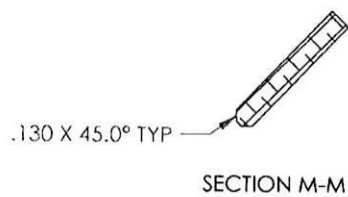
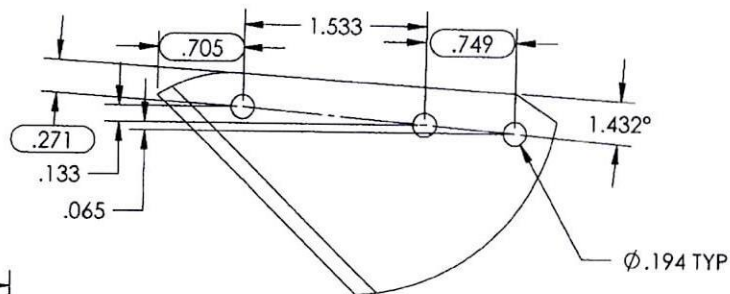
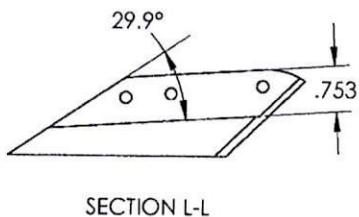


DETAIL F



ORIGINAL DATE P.02 (04-19) 07-10-07		APICAL INDUSTRIES	
DRAWN BY: J. CRICHEL		2608 TEMPLE HEIGHTS DR.	
CHECKED BY: D. SCHUP		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYO		DEFLECTORS	
CONTRACT NO.		DWG NO. 647.3900	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SHEET 3 OF 12	REV C
SCALE: NONE			

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ORIGINAL DATE (DD-MY-YY) 09-10-09		APICAL INDUSTRIES	
DRAWN BY D. SCHWAB		2608 TEMPLE HEIGHTS DR.	
DRAWING APPROVAL P. BRAVO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
CONTRACT NO.		DEFLECTORS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		REV. C	
SIZE B	CAGE CODE 07M26	DWG. NO. 647.3900	SHEET 4 OF 12
SCALE NONE			

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SECTION N-N
 .180 X 45.0° TYP

SECTION AD-AD
 3.376
 .130
 R1.675
 1.504
 .917
 3.135
 .417

4.483
 3.696
 R.269
 R.534
 N
 N
 41.9°
 4.029
 3.414
 3.284
 1.780
 Ø.189 THRU 2PL
 Ø.194 THRU 2PL
 1.196
 .506
 .337
 R.264
 31.4°
 0
 8.007
 7.749
 7.036
 6.618

647.3913

AD
 .480
 4.483
 R.050
 .560
 .362^{+0.002}_{-.000}
 .506
 .910
 AD
 .356 MIN

ORIGINAL DATE: 09-10-08
 DRAWN BY: D. SCHNEPP
 CHECKED BY: D. SCHNEPP
 DRAWING APPROVAL: P. BRAVO
 CONTRACT NO.:
 UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 TOLERANCES ARE:
 2 PLACE DECIMALS ±.01
 3 PLACE DECIMALS ±.005
 ANGLES ±.5°

APICAL INDUSTRIES
 2608 TEMPLE HEIGHTS DR.
 OCEANSIDE, CA 92056-3512 (760)724-5300

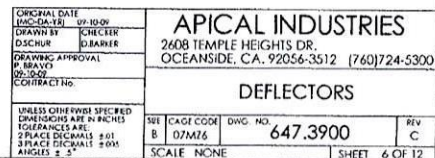
DEFLECTORS

SHEET: B CAGE CODE: D7M26 DWG NO: 647.3900 SCALE: NONE SHEET 5 OF 12

Technical drawing of a shaft with the following dimensions and labels:

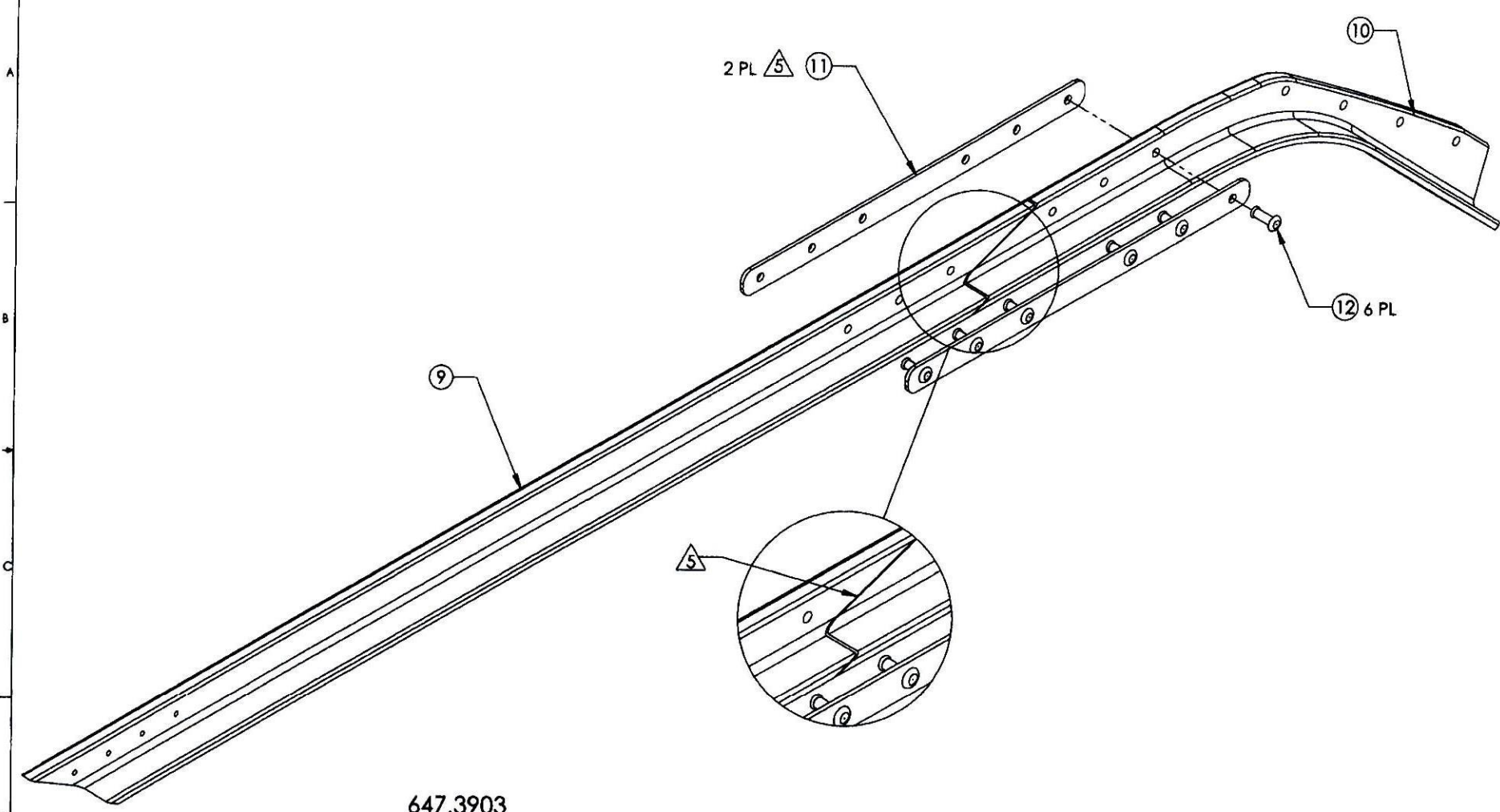
- Overall length: 4.483
- Top diameter: .480
- Top fillet radius: R.050
- Step diameter (top): .560
- Step diameter (bottom): .362^{+0.002}_{-.000}
- Bottom diameter: .356 MIN
- Bottom fillet radius: R.050
- Bottom step diameter: .506
- Bottom step diameter (inner): .510
- Labels: AD (two locations)

ORIGINAL DATE: 09-10-20 DRAWN BY: J. CHESTER CHECKED BY: J. WATKINS DRAWING APPROVAL: P. BRAY CONTRACT NO.:	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR OCEANSIDE, CA 92056-3512 (760)724-5300			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACED DIMENSIONS ±.005 2. PLACED DIMENSIONS ±.001 3. PLACED DIMENSIONS ±.001 4. ALL OTHERS ±.005	SIZE SCALE	CAGE CODE D7M2NE	DWG. NO. 647.3900	REV. C
	SCALE: NONE		SHEET 1	OF 12



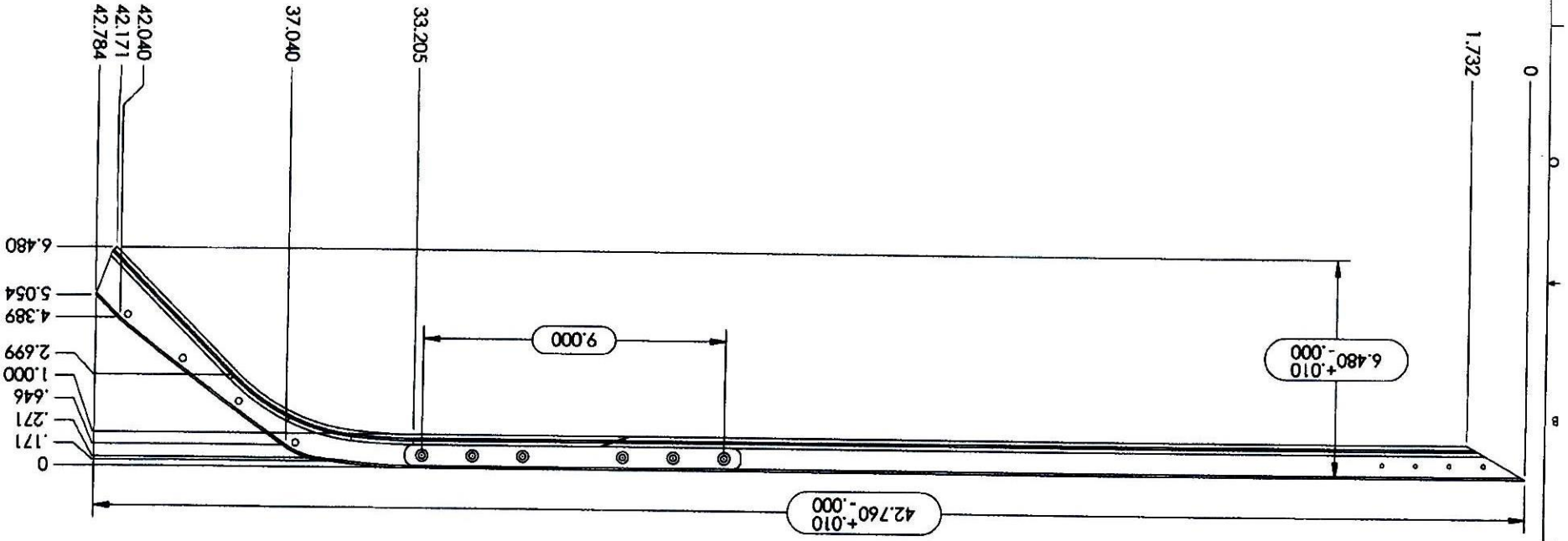
1 2 3 4 5 6 7 8

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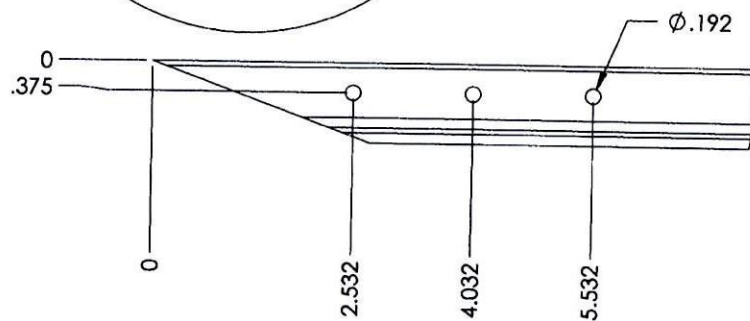
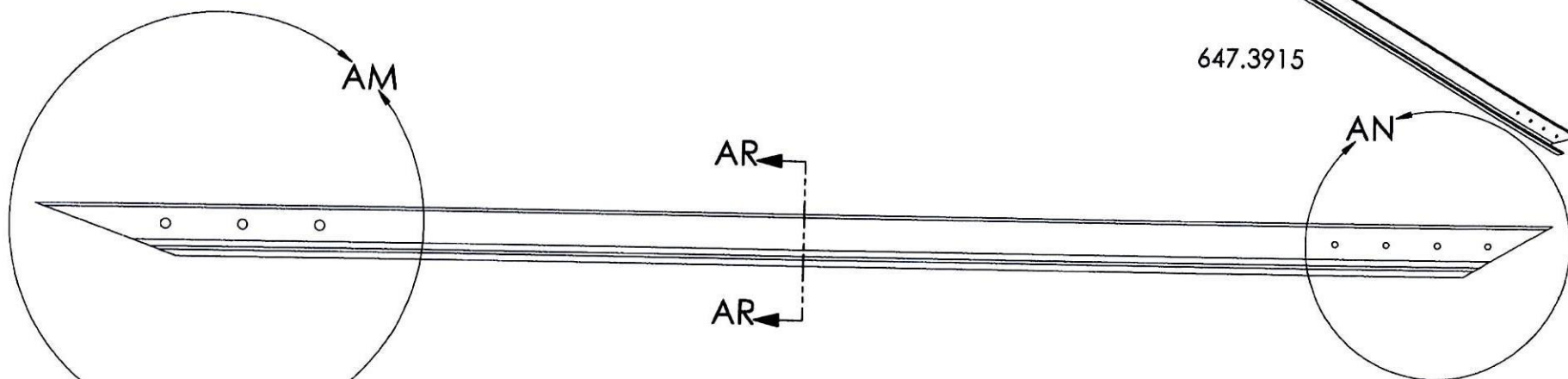
ORIGINAL DATE 10-01-18 08:30:00		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWN BY D.SCHUR	CHECKED BY D.BARNER	DEFLECTORS	
DRAWING APPROVAL P. BIAVO 10-01-18		REV. C	647.3900
CONTRACT NO.		SCALE NONE	SHEET 7 OF 12
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ±.5°			

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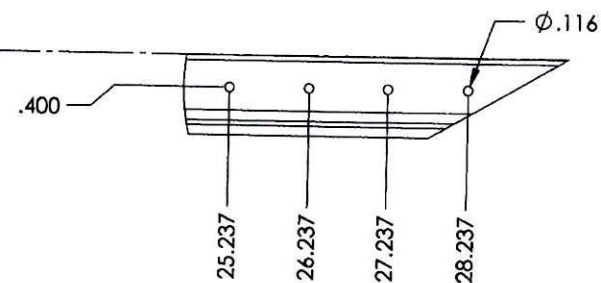


APICAL INDUSTRIES		2408 TEMPLE HEIGHTS DR OCEANSIDE, CA 92056-3512 (760) 724-5300	
DEFLECTORS		DRAWING NO. 07M426	
REV. C		SCALE: NONE	
SHEET 8 OF 12		DATE: 12/12/00	

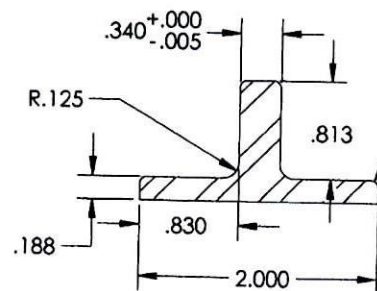
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DETAIL AM



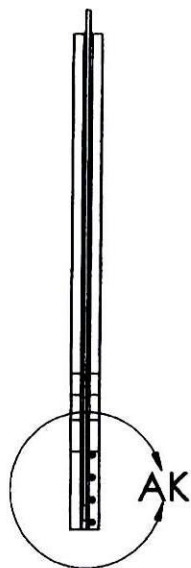
DETAIL AN
R.0625 OR 45° CHAMFER X .0625
4 PL



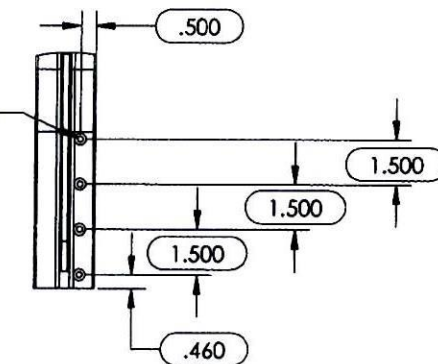
SECTION AR-AR

ORIGINAL DATE (M/D/YR) 08-10-01		APICAL INDUSTRIES	
DRAWN BY DUCHUR		2608 TEMPLE HEIGHTS DR.	
CHECKED BY D. BARNER		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BALVO		DEFLECTORS	
CONTRACT NO.		SCALE NONE	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 2 PLACE DECIMALS ± .005 ANGLES ± .5°		SHEET 9 OF 12	

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4X $\varnothing .196 \pm .010$ THRU ALL
✓ $\varnothing .385 \pm .020$ X $100^\circ \pm 1.000^\circ$



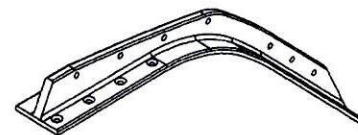
DETAIL AK

647.3915

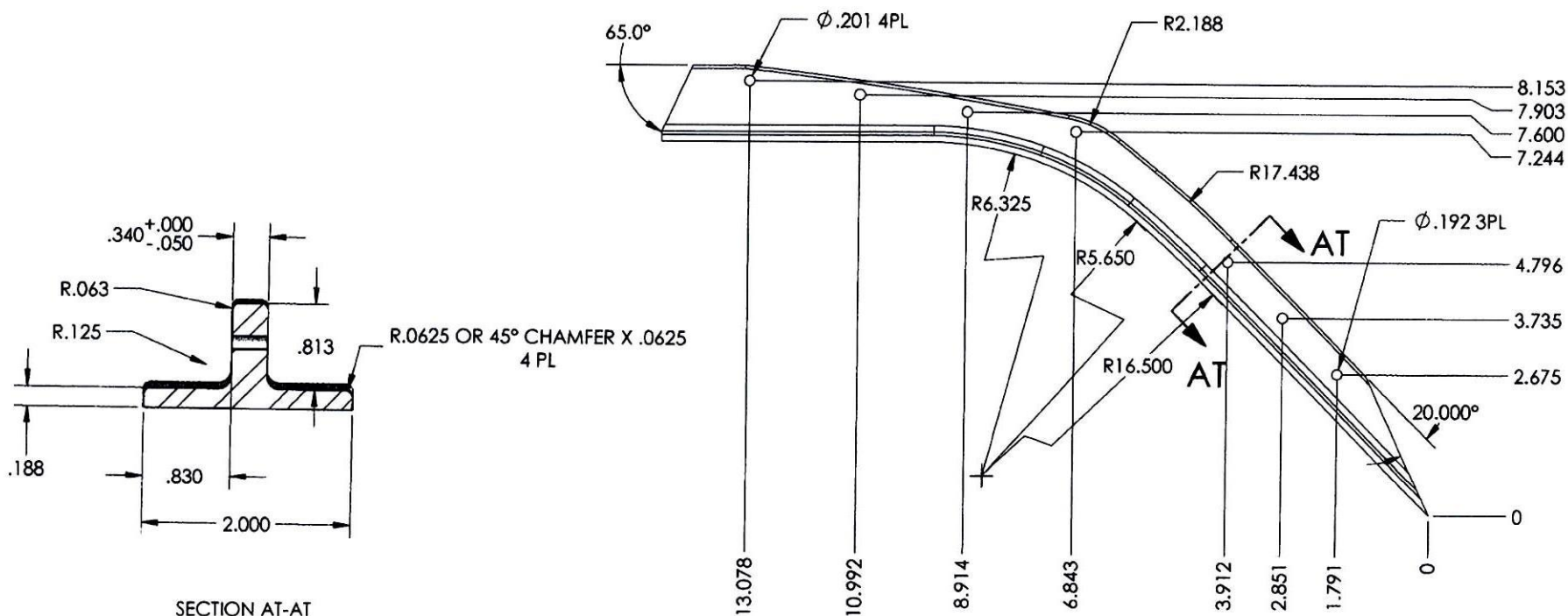
ORIGINAL DATE 10-01-1971		OF 10-01	
DRAWN BY D.SCHUP		CHECKED D.BARKER	
DRAWING APPROVAL P. BRAYO			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1 PLACE DECIMALS $\pm .01$ 2 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$			
SHEET B	CAGE CODE 07M16	DWG. NO. 647.3900	REV C
SCALE NONE		SHEET 10 OF 12	

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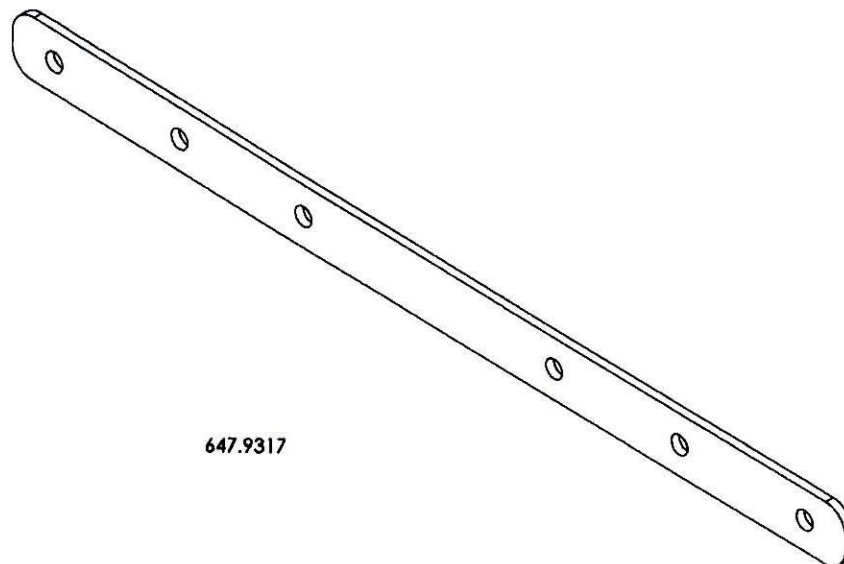


647.3916



ORIGINAL DATE 1-20-04 (1-01) 08-10-09		APICAL INDUSTRIES	
DRAWN BY D.SCHUR		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY D.BARNER		DEFLECTORS	
DRAWING APPROVAL P. BRAY		SEE	REV
DATE 08-10-09		B	C
CONTRACT NO.		DWG. NO.	647.3900
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. PLACE DECIMALS ± .01 2. PLACE DECIMALS ± .005 ANGLES ± .5°		SCALE	NONE
		SHEET 11 OF 12	

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R.250
4 PL

.625

0 .500 2.000 3.500 6.500 8.000 9.500 10.000

.090

Ø.196
6 PL

ORIGINAL DATE 11-01-75		BY: JGP	
DRAWN BY J. GIBLIN		CHECKED BY J. GIBLIN	
DRAWING APPROVAL J. GIBLIN		CONTRACTING	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ± .01 PLATES DECIMALS ± .005 ANGLES ± 5°			
SHEET 8		CAGE CODE 07M26	DWG. NO. 647.3900
SCALE NONE		REV. C	

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DEFLECTORS

SHEET 12 OF 12